SPECIAL REPORT OF THE ISSUE

Prospect of Fish Resources in Reinvigorating the Bangladesh Economy

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Bangladesh is one of the emerging countries in South Asia, with 165 million people. About 700 small and large rivers flow throughout the country, making it one of the largest river networks in the world, with a total length of 24140 km[2]. The great Ganges-Brahmaputra-Meghna River Basin system made Bangladesh huge potential for tremendous fisheries fauna. Having 795 species of freshwater and marine native fish, Bangladesh is one of the most diversified fisheries faunae in the world[3]. Open water capture fisheries and Aquaculture are the two major sources of fish production in Bangladesh. Bangladesh is 5th in world aquaculture production, where it is 3rd in inland open water capture fisheries[4]. The inland water fisheries cover an area of 4.7 million hectares and produce more than 3.7 million metric tons of fish[5]. According to FAO (Food and Agriculture Organization of the UN), fish is one of the affordable economic protein sources which provides 16% of total animal protein throughout the world. Fisheries play a significant role in the socio-economy of Bangladesh providing fresh protein to least-income people. It also creates scope for many employment opportunities that boost the economy to cut poverty. The vast water resources of Bangladesh become the production house of fish. These potential water resources turn into a blessing that boost-up the country's fisheries production of 4.3 million metric tons in the 2018-2019 statistical year[4].

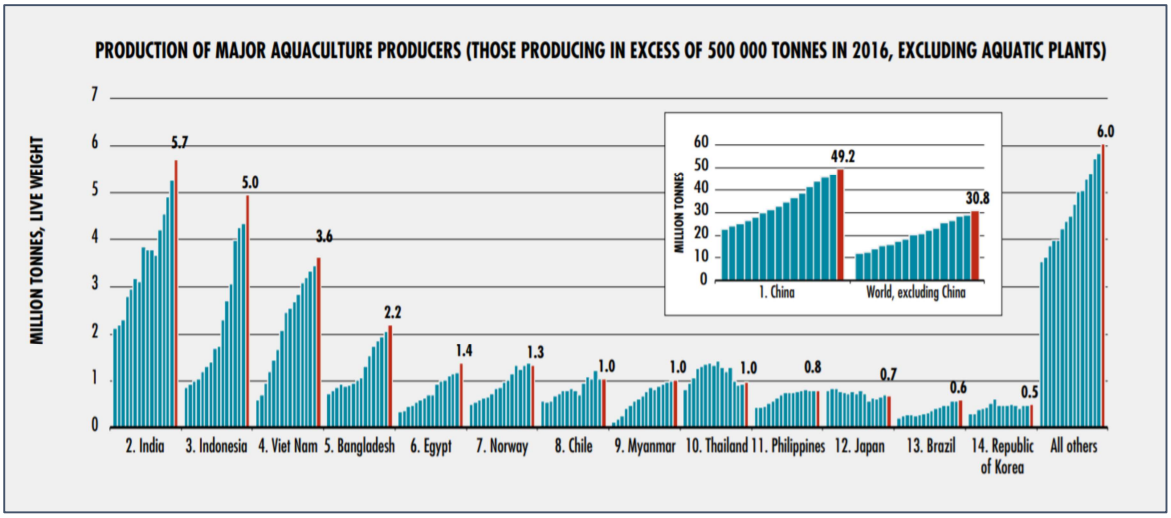


Figure 1. Aquaculture Production of Major Producing regions (FAO, 2018)

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[2] https://en.banglapedia.org/index.php/River

[3]http://www.fao.org/fishery/countrysector/naso_bangladesh/en#:~:text=Fisheries%20in%20Bangladesh%20are%20diverse,species%20that%20have%20been%20introduced.

[4] Agriculture Organization of the United Nations. Fisheries Department. (2018). *The State of World Fisheries and Aquaculture, 2018*. Food & Agriculture Org.

[5]Yearbook of Fisheries Statistics of Bangladesh 2018-2019.

http://fisheries.portal.gov.bd/sites/default/files/files/fisheries.portal.gov.bd/page/4cfbb3cc_c0c4_4f25_be21_b91f84bdc45c/2020-10-20-11-57-8df0b0e26d7d0134ea2c92ac6129702b.pdf

Natural calamities, i.e., floods, heavy rain, etc., are always a threat to Bangladesh, a flood-prone country, due to its geographical position starting at the lower part of the Himalayas and ending at the mouth of the Bay of Bengal. Due to excessive water, it is nearly impossible to produce crops in many floodplains almost year-round. Therefore, these floodplains can only use for fisheries practices. However, this can be used effectively as an opportunity for the country's dynamic fish production.

Bangladesh is one of the self-sufficient fish-producing countries globally, where aquaculture plays a vital role by producing 56.76% of the country's total fish production. Bangladesh exports finfish, shellfish, and other fishery products, which earn handsome foreign currency every year. Bangladeshi fish and fishery products are exported to different countries like European Unions, USA, China, Japan, Russia, etc. Bangladesh exports more than 73 thousand metric tons of fishery products worth nearly 512 million USD in 2018-2019 FY (Fiscal Year). Shrimp and prawn are the most demandable fisheries items which have huge interest to many countries, i.e., EU, USA, Japan, etc. In 2018-2019 FY, the growth rate of shrimp and prawn production is 1.44%. In addition, this sector is expanding each year which opens new windows of employment opportunities. Hilsa (*Tenualosa ilisha*), the national fish of Bangladesh, is exclusively ranked as the top production species by contributing 12.15% alone in total fish production in 2018-2019 FY. It is also the brand species (declared as Geographical Indication species) of Bangladesh which is so delicious and beautiful silvery colour. Bangladesh alone produces 86% of total global hilsa production.



Figure 2. Hilsa fish from a local market

Top culturable fish species in Bangladesh are Pangas, Tilapia, Rui, Silver carp, Mrigal, Catla, and Koi etc. Among them, Tilapia production is booming nowadays, ranked 4th in the world and 3rd in Asia[4]. In Bangladesh, more than 12% of its population is somehow dependent on fisheries for their livelihood, contributing near about 3.5% of the National GDP.



Figure 3. Local Fishmarket in Chittagong

Natural fish stock is not limitless; therefore, the country needs to focus on cultural fisheries than capturing from nature. However, the Fisheries industries booming in recent decades by using modern technologies. Aquaculture industries produce 2.4 million metric tons of fish which is more than double in 2018-2019 compared to 2008-2009 in Bangladesh. If this growth graph sustains positively, Bangladesh can earn more and more foreign currencies from this sector in the coming days. This dynamic sector has many prospects, but it also has some challenges. Sea level rise, climate change, over-exploitation from natural stock, water pollution, salinity rising in coastal areas are the main challenges for the future of Bangladesh fisheries. Many fish species become extinct from the nature stock due to over-exploitation. Industrialisation near the bank of the rivers also damages the water environment devastatingly. Immediate actions need to apply to minimise these challenges. Thus, it will help us to strengthen our fisheries sector in every aspect. Exclusively, it will help to eradicate poverty from the country.

Bangladesh is a suitable country for fish production. In addition, fisheries have adequate scope to strengthen the economy of Bangladesh. Therefore, the government must make policies involving the rural farmers to support them in improving production. NGOs, researchers, and other stakeholders must come forward to support the hatcheries and farmers with recent discoveries and technologies. Hence this potential sector will expand and grow sustainably to fulfil the country's demand more suitably.